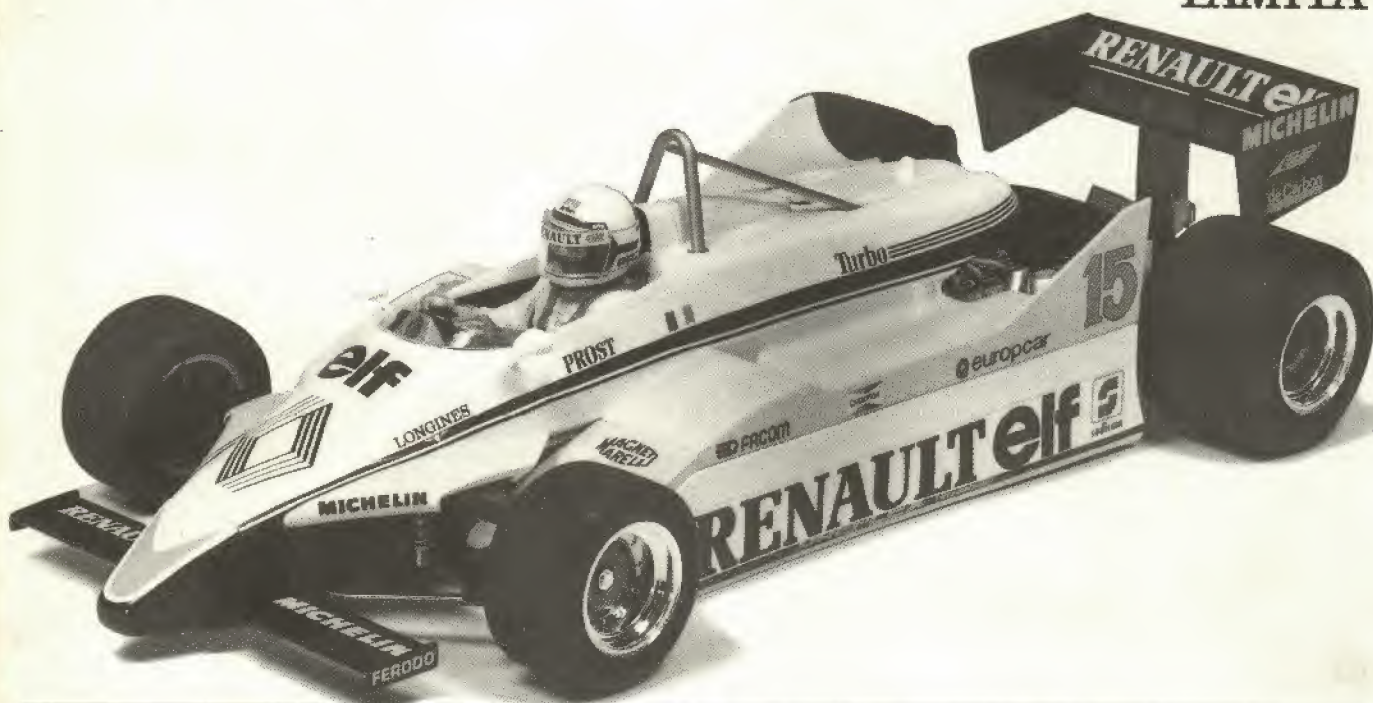
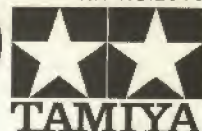


RENAULT RE-30B TURBO



Turbo engines, which are now almost standard in F-1 racing, were first introduced by Renault in 1977. In 1966, the F-1 rules committee decided that normally aspirated engines could have a displacement of 3 liters, and those that were turbocharged could have a displacement of 1.5 liters. It was known, of course, that turbocharging could produce a lot of power, but none of the teams were willing to give up half of their cubic displacement to see if they could be competitive, and they were also known to have an acceleration lag time. The Renault team, however, decided to give it a go with their RS-01 engine of 1492cc. Their efforts in 1977 didn't bring about any wins, but it sure attracted the attention of the other teams and manufacturers. Renault continued to improve their engine and in 1979 used it in a vehicle which adopted the ground effect's technique, introduced by the Lotus team. They also utilized twin turbos instead of single, making for easier installation and a reduction of lag time plus a greater amount of torque over a wider RPM band. As a result of this, Jean-Pierre Jabouille won the French Grand Prix with the RE-10 and took four pole positions with it in the German, Austrian, Dutch and Italian GP's. The RE-20 of 1980 brought the Renault team three wins during the season and even though there were still problems with this system, proved that it was the coming thing. So much so that Renault, Ferrari, Toleman, Brabham and Alfa Romeo, had all entered turbocharged 1.5 liter F-1 racers in 1982. Renault introduced the RE-30 during 81 and the RE-30B 1982. With a displacement of 1492cc, this V-6 engine with twin turbos produces a maximum power of 560hp, and though other manufacturers have gone to Aluminum blocks for lightness, Renault continues to use cast iron for strength to endure the tremendous pressures generated by

turbocharging. To further decrease the lag time in acceleration, Renault uses an electronic fuel injection system. The radiators, intercooler and turbo units are laid out symmetrically in the vehicle's side pontoons. The intercooler is a feature seen only on turbocharged engines and is required to cool down the compressed air, which becomes 200 degree C. It is said that for each degree of cooling an increase of one horsepower can be expected in a 1.5 liter engine. The intercooler on the RE-30B is of the compound type in that it is cooled by the flow of cool air and also by the coolant of the radiator which helps to stabilize the performance of the engine. Front and rear suspension are of the locker type and wishbone, with inboard springs and are so arranged so as not to interfere with airflow needed for ground effect types of cars. The RE-30B made its debut at the South African GP early in 1982 and won it with Alain Prost at the wheel. In the French Grand Prix, they finished 1 & 2 with Arnoux and Prost. They won again at the Italian races and throughout the year were on the pole position 10 out of 16 times.

* Turbo-Motore, welche jetzt in fast allen Formel 1 Rennwagen als Antrieb dienen, wurde erstmals 1977 von Renault eingeführt. 1966 beschloss das Komitee der Formel 1 Klasse, dass nur Motore mit 3 Liter und turbogeladene Motore mit 1,5 Liter gefahren werden dürfen. Es war natürlich bekannt, dass durch das turboladen eine ganze Menge Kraft produziert werden konnte und kein Team wollte die Hälfte ihrer Cubicverdichtung aufgeben, nur um zu sehen, ob sie trotzdem konkurrenzfähig sind, denn es war ja bekannt, dass eine Verzögerung in der Beschleunigung eintreten würde. Das Renault Team wagte den Versuch mit dem RS-01 Motor mit 1492cc, konnte jedoch 1977 keinen Sieg nach Hause

fahren, aber die Aufmerksamkeit anderer Teams und Hersteller auf sich ziehen. Renault verbesserte den Motor und baute den Motor 1979 in einen Wagen ein, der die Ground-Effect-Technik vom Lotus Team hatte. Anstelle des Einzelturbo wurde ein doppelter genommen, dadurch die Verzögerungszeit verringert und der Schub vergrößert. Das Ergebnis war der Sieg Jean-Pierre Jabouille im French Grand Prix mit dem RE-10 und nahm vier Pole Positionen im Grand Prix von Deutschland, Österreich, Holland und Italien ein. Der RE-20 von 1980 brachte dem Renault Team 3 Siege und obwohl es noch immer Probleme gab, erwies es sich, dass der Turbo-Motor die Zukunft war. Ferrari, Toleman, Brabham und Alfa Romeo erkannten dies und bauten 1982 in die Rennwagen auch die 1,5 Liter Turbo-Motore ein. Renault blieb nicht stehen und 1981 kam der RE-30, 1982 der RE-30B. Mit einer Verdrängung von 1492cc bringen diese V-6 Motore mit dem Doppel-Turbo 560 PS und obwohl andere Hersteller Alu Blocks aus Gewichtsgründen nehmen, blieb Renault beim Spritzgussblock. Um auch die Verzögerung weiter herabzusetzen, wurde von Renault ein elektronisches Einspritzsystem verwendet. Die Kühler, Zwischenkühler und die Turbo-Anlagen wurden seitwärts in den Pontoons untergebracht. Den Zwischenkühler sieht man nur bei Turbo-Motoren und wird zur Kühlung der komprimierten Luft benötigt, da diese sich auf 200 Grad erhitzt. Jedes Grad der Kühlung bringt ein PS im Motor. Die Front- und Hinterradaufhängung ist so angebracht, dass der für den Ground Effect benötigte Luftstrom nicht gestört wird. Anfang 1982 wurde der RE-30B im GP von Südafrika vorgestellt und wurde mit Alain Prost Sieger. Im French GP wurde Arnoux und Prost Erster und Zweiter, auch in Italien wurde gewonnen und im ganzem Jahr konnte 10 mal von 16 Rennen die Pole Position gehalten werden.

PAINTING

«Painting of the Renault RE-30B»

The Renault RE-30B colors are lemon yellow with black and white trim. Refer to the drawings at right for decal and sponsor's mark placement. Alain Prost drove the RE-30B with the red number 15 and Rene Arnoux the car with the blue 16. The Rhombic emblem on the nose of the car is the mark for the Regie Renault firm.

«Bemalung des Renault RE-30B»

Die Farben des Renault RE-30B sind zitronengelb mit schwarz und weissen Streifen. Siehe Zeichnung rechts wo die Abziehbilder und Sponsoren Marken angebracht werden. Alain Prost fuhr den RE-30B mit der roten Nummer 15 und Rene Arnoux hatte die Nummer 16. Auf dem Wagen-Vorderteil ist das Zeichen von Renault angebracht.

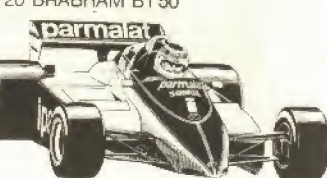
«Colors Required»

★ From Tamiya Acrylic Paints

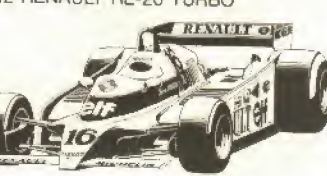
Black	X-1
White	X-2
Royal Blue	X-3
Orange	X-6
Red	X-7
Lemon Yellow	X-8
Brown	X-9
Gun Metal	X-10
Semi Gloss Black	X-18
Flat Black	XF-1
Flat White	XF-2
Flat Red	XF-7
Hull Red	XF-9
Flat Flesh	XF-15
Flat Aluminum	XF-16
Medium Grey	XF-20
Metallic Grey	XF-56
Desert Yellow	XF-59
Flat Base	X-21
★ From Tamiya Paint Markers	
Chrome Silver	X-11
Gold Leaf	X-12

BUILD A COLLECTION OF TAMIYA PRECISION CAR

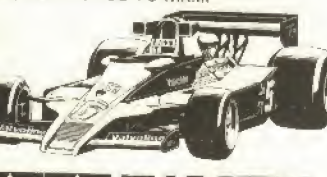
1/20 BRABHAM BT50



1/20 RENAULT RE-20 TURBO

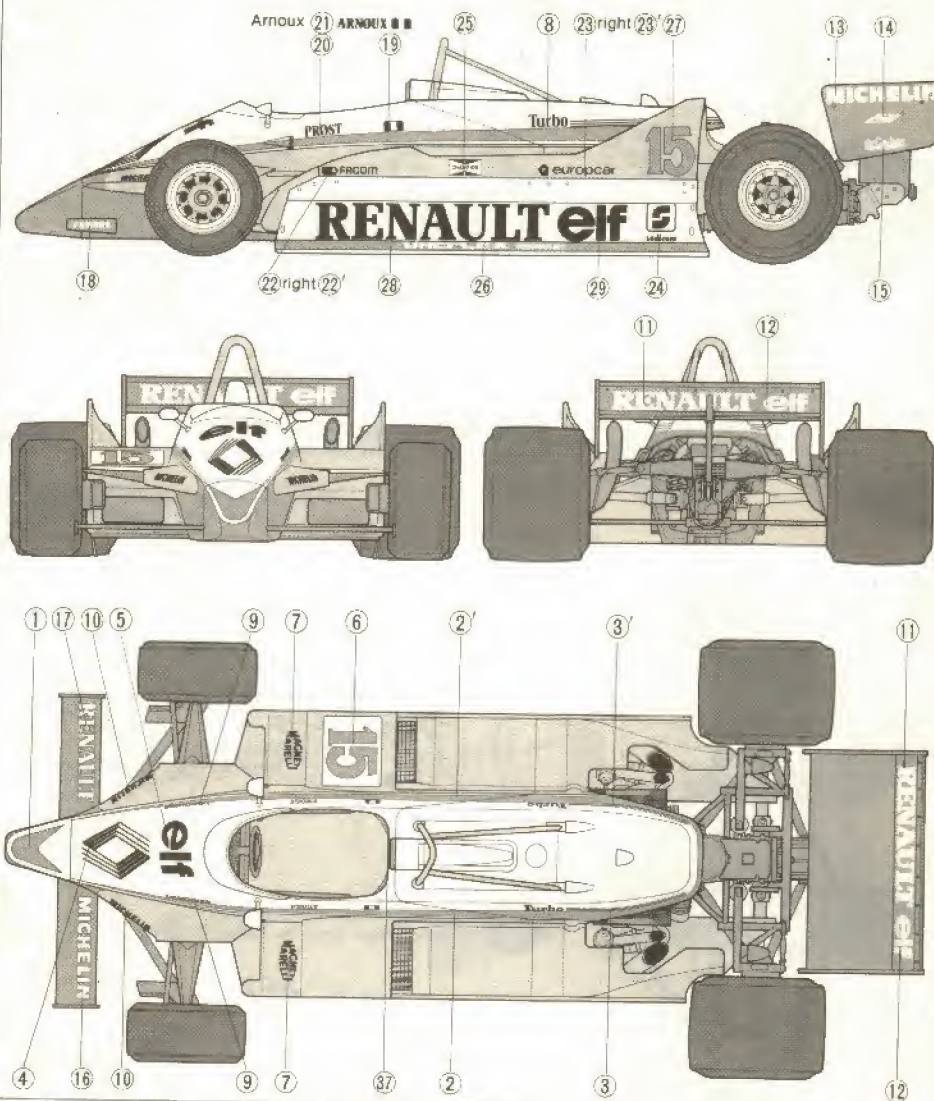


1/20 LOTUS 78 Mk.III



TAMIYA
TAMIYA PLASTIC MODEL CO.
628, OSHIKA, SHIZUOKA-CITY, JAPAN.

«Marking of Renault RE-30B Turbo»



APPLYING DECALS

«Decal Application»

- (1) Remove all dust, dirt and adhesive smears with a wet cloth before applying any decals.
- (2) The decal to be applied should be removed beforehand from the decal sheet. Cut off translucent films along colored parts.
- (3) Dip the decal in tepid water for about 10 seconds and then remove it onto a clean cloth. Be careful of over immersion to avoid loss of decal's adhesive.

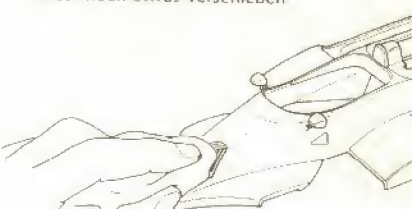


- (4) Hold the backing sheet edge and slide the decal onto the model.
- (5) Wet the decal with a little water on your finger so that it can be moved more easily into position.
- (6) Press the decal down gently with a clean soft cloth to remove air bubbles and until all excess water has been fully absorbed. When a decal has to be applied to a surface which is uneven or curved, press the decal down with a hot towel so that the decal will fit the

contours perfectly. Cut off the excess transparent portion around each decal. The decal must then not be touched until dry.

«Abziehbilder-Decals»

- (1) Staub, Schmutz und Klebstoffreste mit nassem Tuch entfernen.
- (2) Decals erst ausschneiden entlang den Linien.
- (3) Decals in Wasser legen, dann nach 10 Sekunden auf z.B. Handtuch legen und etwas abtrocknen lassen.
- (4) Decal an der Unterlage halten und Bild auf das Modell schieben.
- (5) Mit etwas Wasser auf dem Finger lässt sich das Decal noch etwas verschieben.



- (6) Decal mit etwas Stoff gut andrücken um die Luftblasen zu entfernen und das Wasser abzutrocknen. An unebenen Stellen kann man mit heissen Tuch das Decal besser andrücken. Transparente Überreste am Decal abschneiden. Decal nicht mehr berühren, bis getrocknet ist.

RE



Turbo engines, which standard in F-1 racing, ed by Renault in 197 rules committee deci aspirated engines cou ment of 3 liters, and th bocharged could have 1.5 liters. It was know turbocharging could power, but none of the to give up half of the ment to see if they cou and they were also kno celeration lag time. T however, decided to gi RS-01 engine of 1492c 1977 didn't bring abou sure attracted the atte teams and manufactu tinned to improve thei used it in a vehicle w ground effect's technic the Lotus team. They turbos instead of sim easier installation and time plus a greater am a wider RPM band. As Jean-Pierre Jabouille Grand Prix with the RE pole positions with it Austrian, Dutch and RE-20 of 1980 brought three wins during the though there were still p system, proved that it thing. So much so that Toleman, Brabham and all entered turbocharg racers in 1982. Renault RE-30 during 81 and t With a displacement of engine with twin turbos imum power of 560hp, a manufacturers have go blocks for lightness, Ren use cast iron for streng tremendous pressures

READ BEFORE ASSEMBLY.

ERST LESEN — DANN BAUEN.

★ Study the instructions and photographs before commencing assembly.
★ You will need a sharp knife, a screwdriver, a file and a pair of pliers.
★ Use cement sparingly. Use only enough to make a good bond.
★ Apply cement to both parts to be joined.

This mark denotes paint color, with color names and numbers for Tamiya Acrylic Paints and Tamiya Paint Markers. Page 8 has detailed painting instructions; however, some parts should be painted prior to model's completion, and these are called out during assembly.

★ Vor Beginn die Bauanleitung studieren und den Nummern nach die Elemente zusammenbauen.

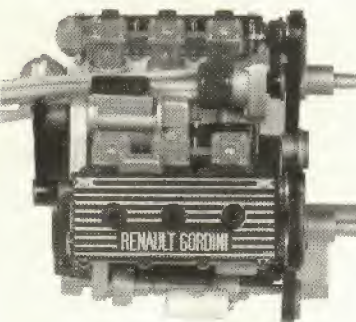
★ Bauteile nicht vom Spritzling abbrechen, vorsichtig abschneiden oder abwickeln.

★ Teile vor Kleben zusammenhalten, auf genauen Sitz achten. Nicht zuviel Klebstoff verwenden. Kleine Teile hält man mit Pinzette fest.

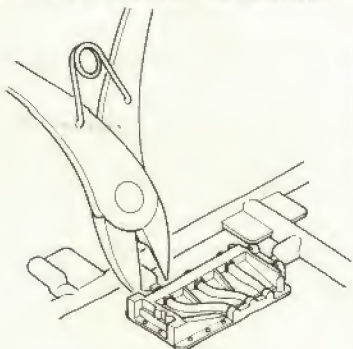
★ Abziehbilder vorsichtig von der Unterlage im Wasser abschieben, auf richtigen Sitz achten und gut trocknen lassen.

Dieses Zeichen zeigt die Farbe und Farbnnummer der Tamiya Acryl-Farben und Paint Marker.

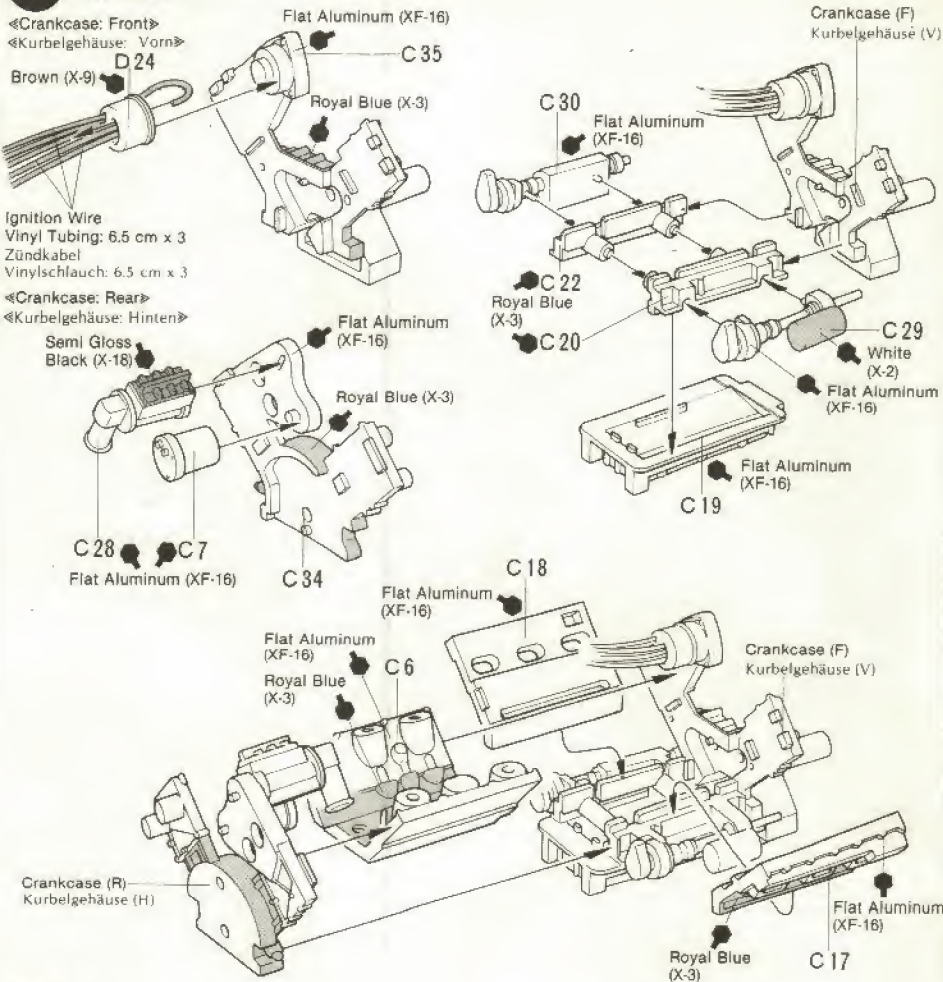
2 «Completed Engine» «Kompletter Motor»



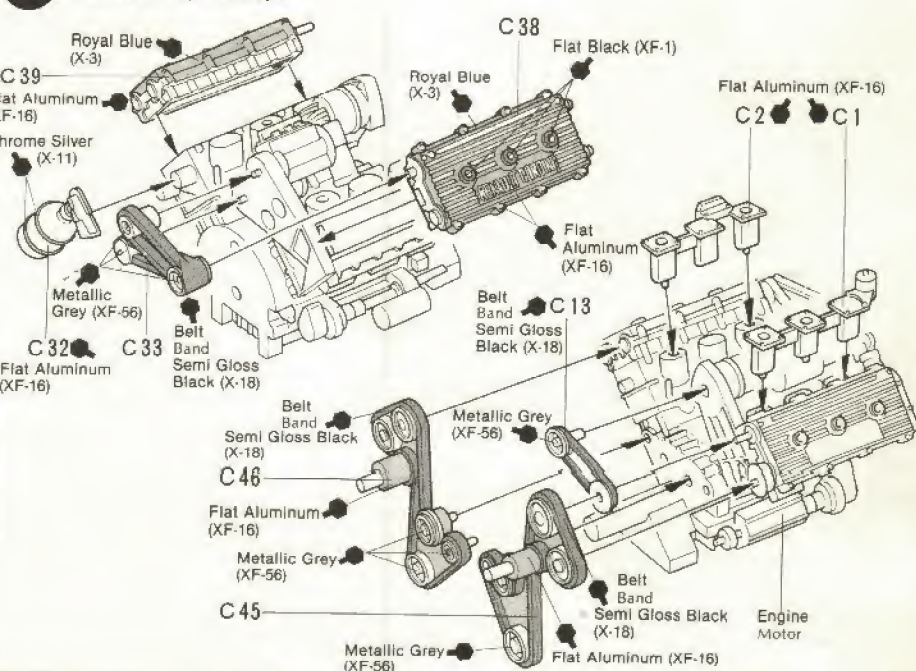
Do not break parts away from sprue, but cut off carefully with a pair of pliers.
Bauteile nicht vom Spritzling abbrechen, vorsichtig abschneiden oder abwickeln.



1 Assembly of Engine Motorenbau



2 Attaching Cylinder Heads Einbau der Zylinderköpfe



3 «Drive Shaft» «Antriebswelle»

«Right»
«Rechts»



«Left»
«Links»



5 «Completed Power» «Eingebautes Getriebe»



Before cementing parts with a knife, etc. from which adhesive is to be removed. Chromeschicht an Klebeflächen.

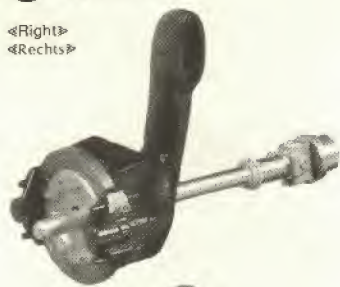


PAINT MARKER

Hand held, Tamiya enamel paint markers. For the final detail touch, 12 of the markers used in modelling them at your local hobby shop.

3 «Drive Shaft» «Antriebswelle»

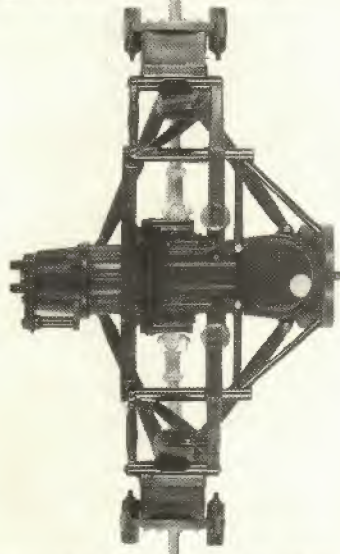
«Right»
«Rechts»



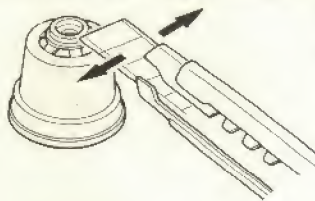
«Left»
«Links»



5 «Completed Power Train» «Eingebautes Getriebegehäuse»



Before cementing parts, remove plating with a knife, etc. from the surfaces to which adhesive is to be applied.
Chromschicht an Klebestellen entfernen.



PAINT MARKER

Hand held, Tamiya enamel paint markers. For the final detail touch, and professional results. 12 of the most popular colors used in modeling. See and test them at your local hobby supply house.

3 Assembly of Drive Shaft Montage der Antriebswelle

«Drive Shaft: Right»
«Antriebswelle: Rechts»

Metallic Grey (XF-56)

Flat Aluminum (XF-16)

Gun Metal (X-10)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

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Semi Gloss Black (X-18)

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Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

White (X-2)

Chrome Silver (X-11)

Semi Gloss Black (X-18)

4 Assembly of Gear Box Zusammenbau der Getriebegehäuse

Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

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Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

5 Assembly of Rear Suspension Zusammenbau der hint. Radaufhängung

Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

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Gun Metal (X-10)

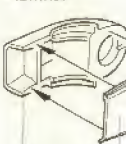
Gun Metal (X-10)

Gun Metal (X-10)

Gun Metal (X-10)

7 «Assembly» «Montage»

«Left»
«Links»



Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

Semi Gloss Black (X-18)

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Semi Gloss Black (X-18)

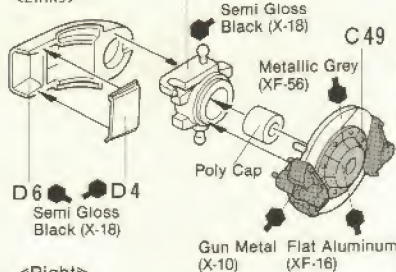
Semi Gloss Black (X-18)

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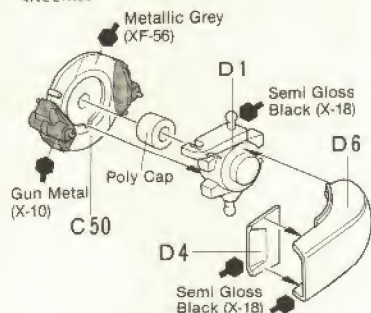
TAMIYA FARBI
SPRACHE
Letzte Neuheiten
und Schiffe, I
scher Sprache s
risierte, Fernge
Qualitates-Mod

7 «Assembly of Uprights» «Montage der Achs-Lager»

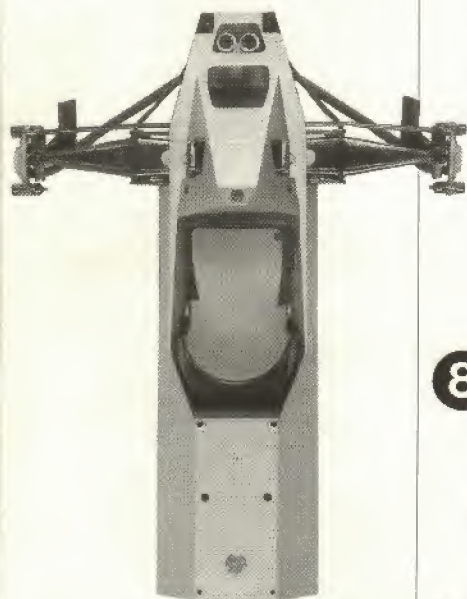
«Left»
«Links»



«Right»
«Rechts»



8 «Cockpit» «Cockpit»



TAMIYA ACRYLIC PAINTS

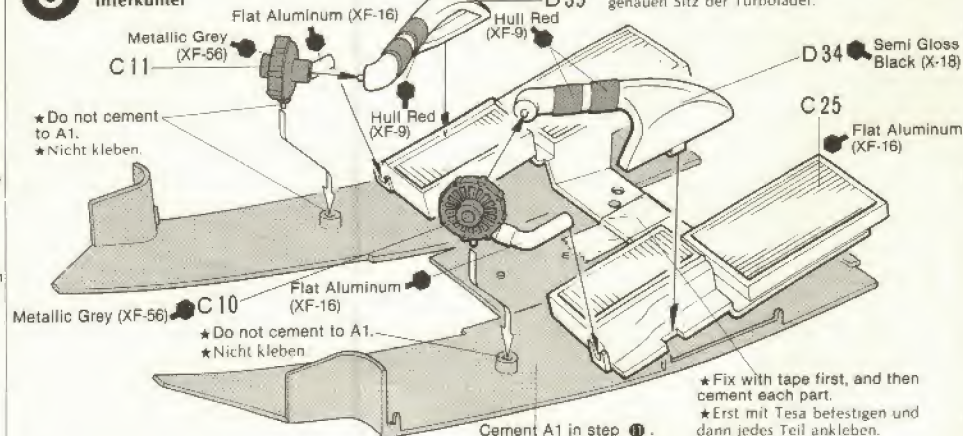
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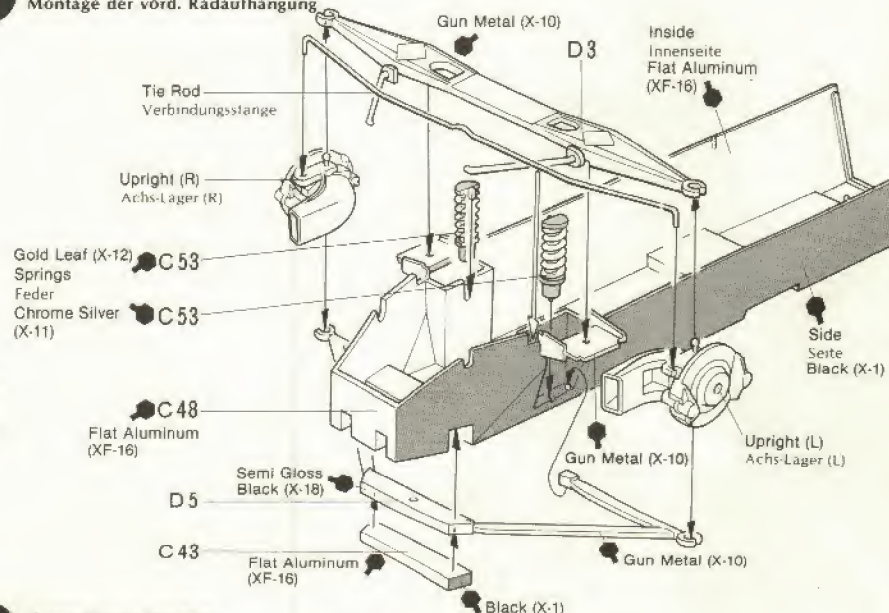
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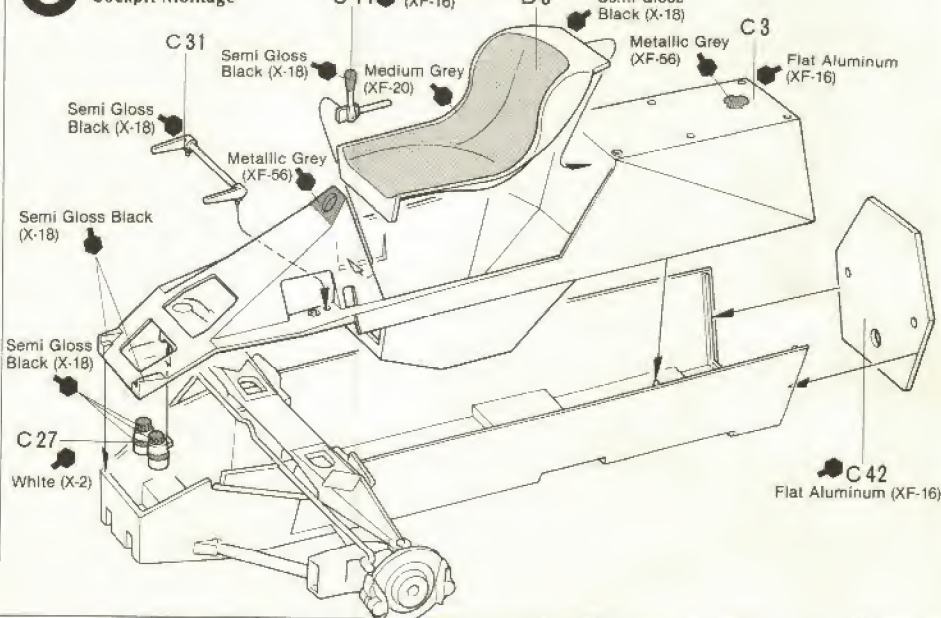
6 Assembly of Intercooler Interkühler



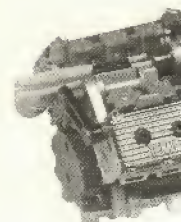
7 Assembly of Front Suspension Montage der vord. Radaufhängung



8 Assembly of Cockpit Cockpit Montage

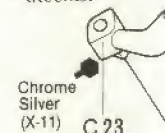


9 «Attached» «Eingebaute»

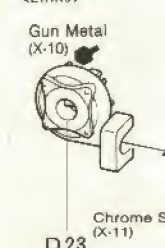


10 «Turbocharger» «Turbolader»

«Right»
«Rechts»

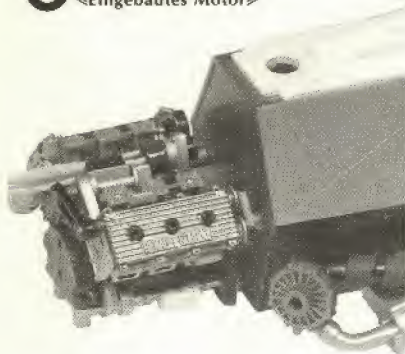


«Left»
«Links»



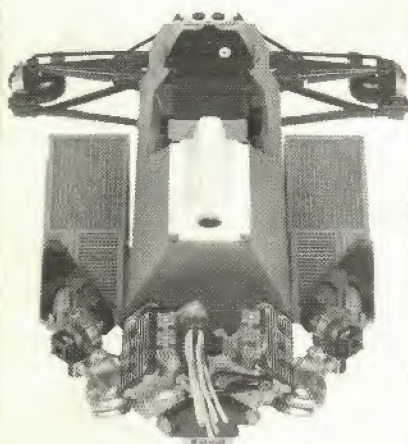
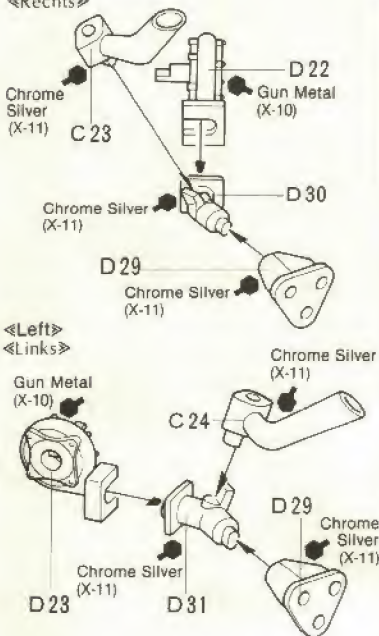
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9 «Attached Engine»
«Eingebautes Motor»



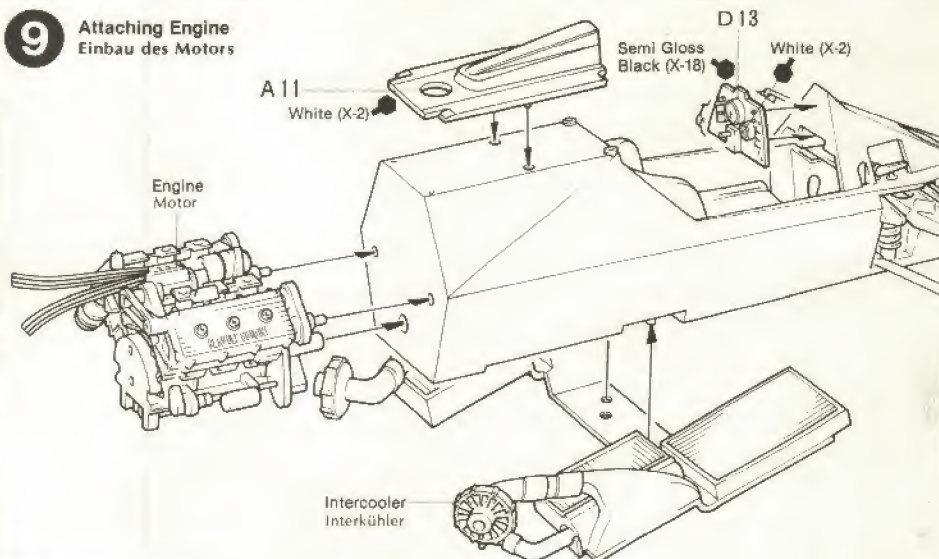
10 «Turbocharger»
«Turbolader»

«Right»
«Rechts»

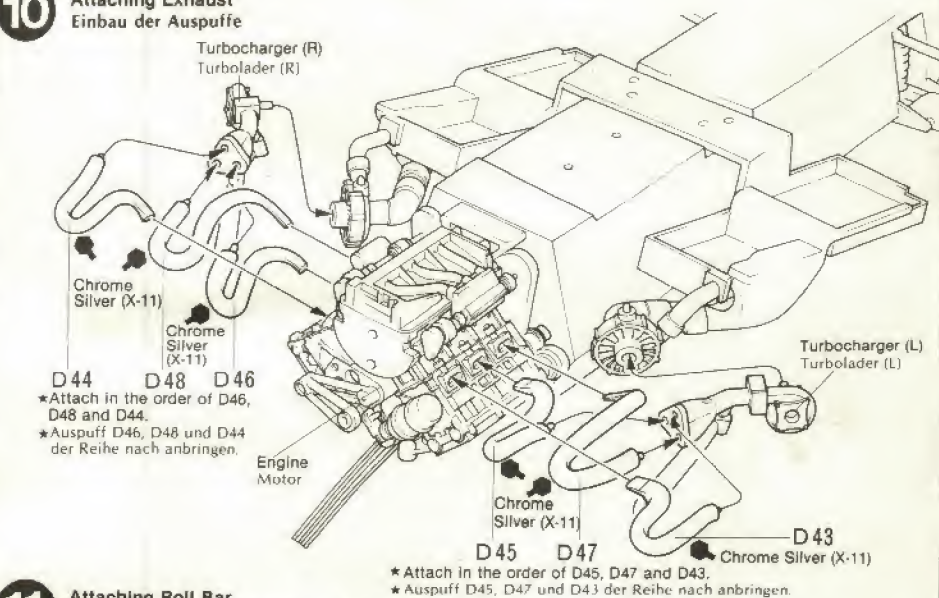


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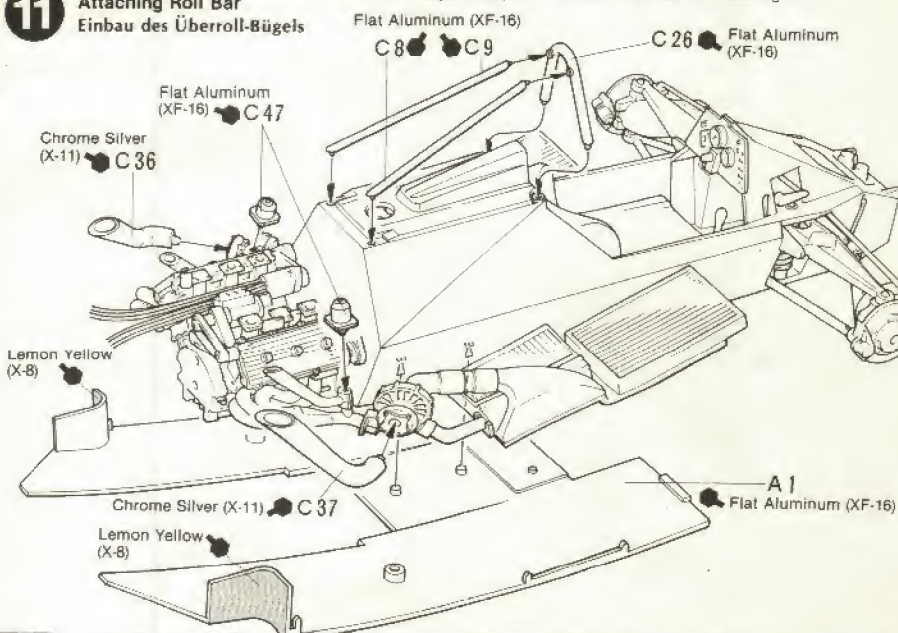
9 Attaching Engine Einbau des Motors



10 Attaching Exhaust Einbau der Auspuffe



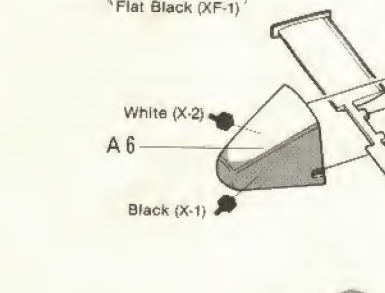
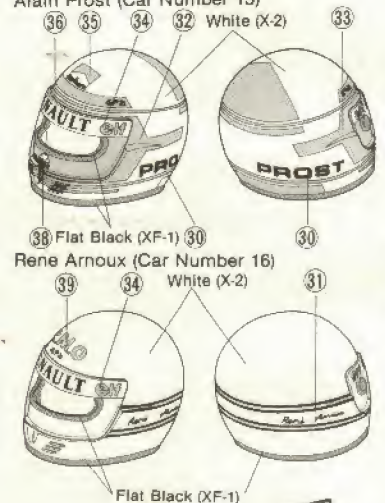
11 Attaching Roll Bar Einbau des Überroll-Bügels



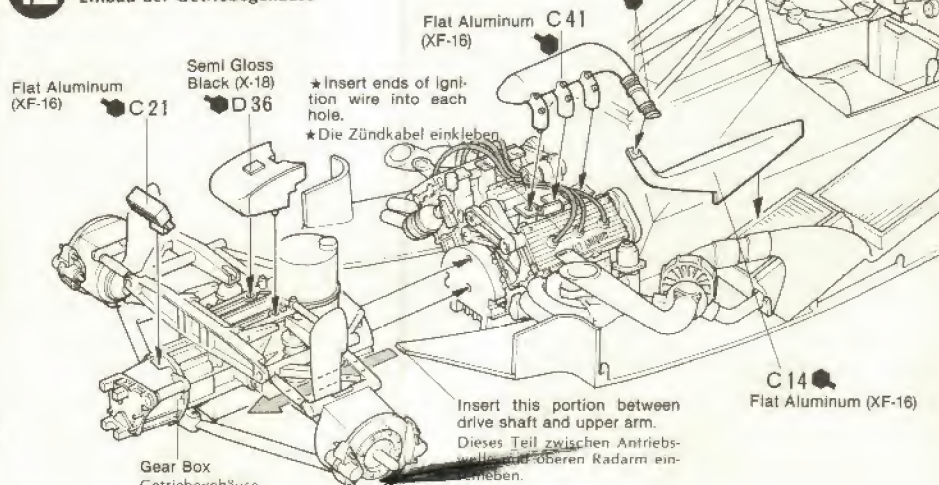
- 13 «Figure»**
 «Figur»
 ★Fit driver's arm to steering wheel in step 12
 ★Die Arme des Fahrers dem Lenkrad entsprechend abkleben.

E 1 Flat Flesh (XF-15)
 A 2 A 3
 Gloves: Orange (X-6) + Flat Red (XF-7)
 Inside: Desert Yellow (XF-59)
 Z 2
 Z 1
 Z 5
 Belt: Flat Red (XF-7)
 Overall: Prost: Flat White (XF-2)
 Arnoux: Royal Blue (X-3) + Flat Base (X-21)

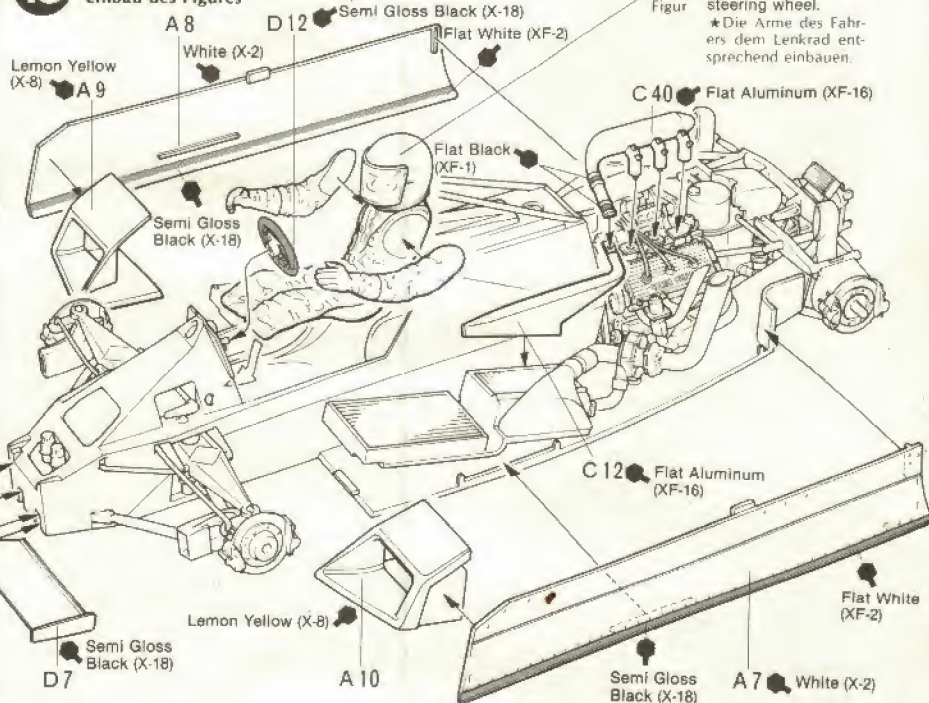
«Helmets»
 «Helme»
 Alain Prost (Car Number 15)
 Rene Arnoux (Car Number 16)



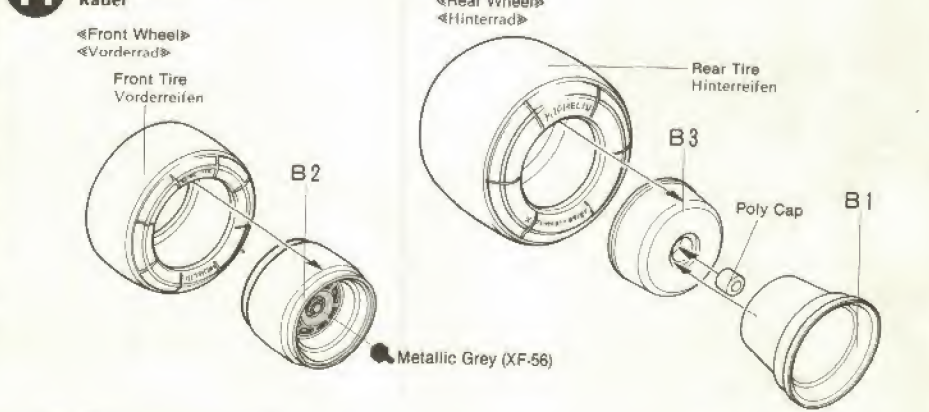
12 Attaching Gear Box
 Einbau der Getriebegehäuse



13 Attaching Figure
 Einbau des Figures



14 Assembly of Wheels
 Räder



«Painting with Masking»
 When the paint is completely dry, apply masking tape or sticky phone tape over the wheel body. Draw out the required shape onto the paper with a sharp knife, then cut the paper along the lines. Have drawn very carefully, the paper not required to be perfect. Finally press the mask onto the plastic to ensure it sticks.

«Bemalung mit Klebeband»
 Farbe muss vollkommen trocken sein. Klebeband oder Abdeckpapier auf das Rad aufkleben. Die zu bemalende Fläche vorsichtig ausschneiden. Abdeckpapier gut trocknen der Farbe.

16 «Completion»
 «Vollendung»



Cockpit Cover
 ★Do not cover cockpit cover
 ★Nicht kleben

Front Wheel
 Vorderrad



«Painting with Masking Tape»

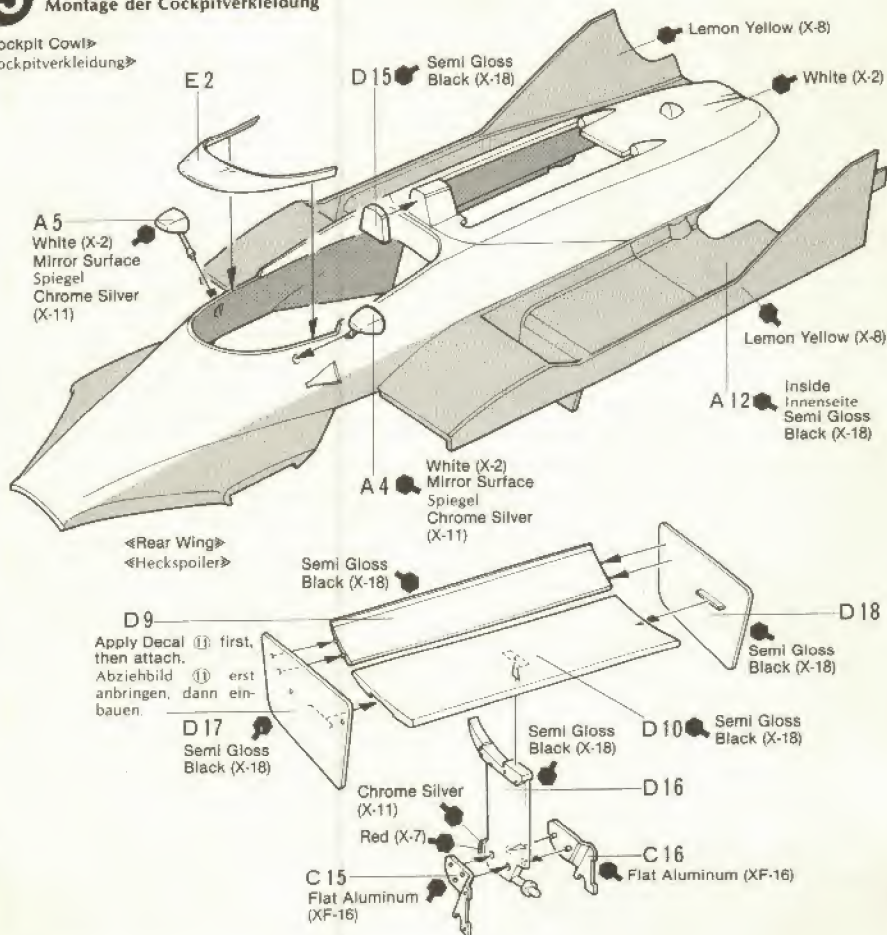
When the paint is completely dry, apply masking tape or sticky paper (not cellophane tape) over the whole area of the body. Draw out the required shape you want onto the paper with a hard pencil, then cut the paper along the lines you have drawn very carefully. Then remove the paper not required to mask the body. Finally press the mask firmly down onto the plastic to ensure it seals it from the paint.

«Bemalung mit Klebeband»

Farbe muss vollkommen trocken sein. Nur Klebepapier oder Abdeckband verwenden — niemals Teasfilm — und gut anliegend aufkleben. Die zu bemalenden Flächen ausschneiden. Abdeckmaterial erst nach gutem Trocknen der Farbe entfernen.

15 Assembly of Cockpit Cowl Montage der Cockpitverkleidung

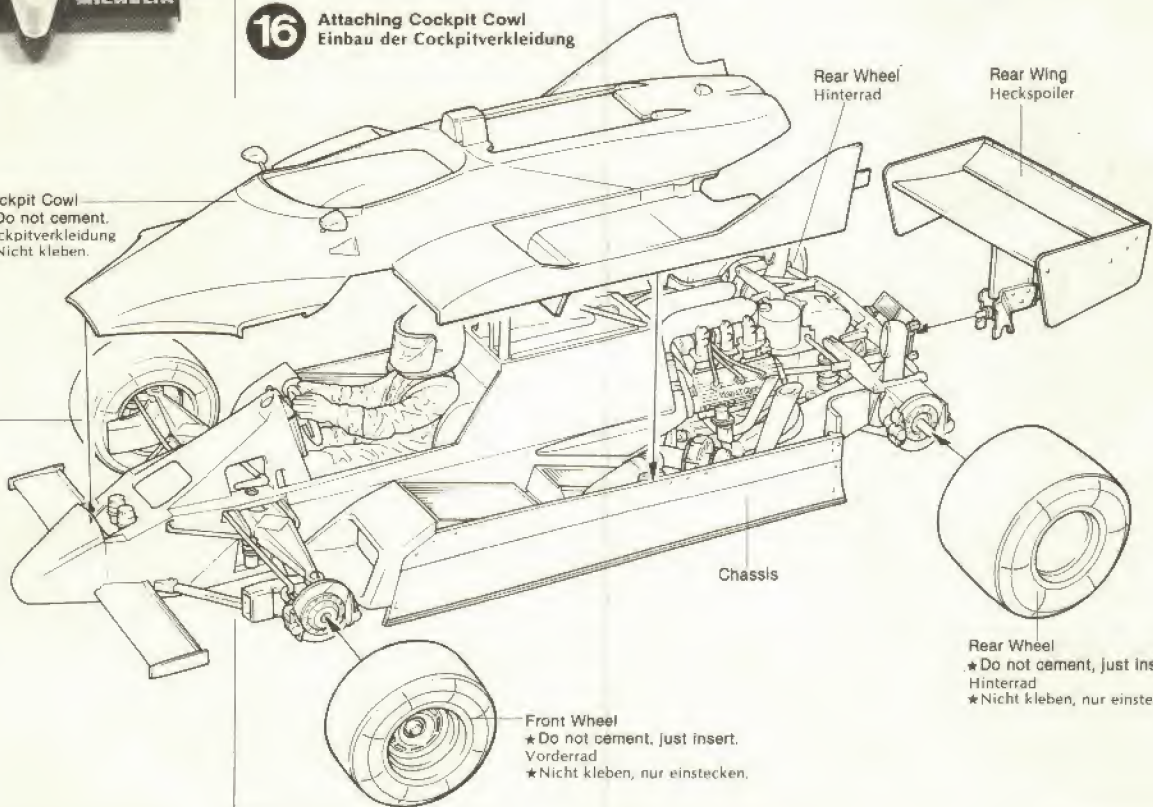
«Cockpit Cowl»
«Cockpitverkleidung»



16 Attaching Cockpit Cowl Einbau der Cockpitverkleidung

Cockpit Cowl
★ Do not cement.
Cockpitverkleidung
★ Nicht kleben.

Front Wheel
Vorderrad



16 «Completion» «Vollendung»



PAINT

«Painting of the Renault RE-30B»
The Renault RE-30B is painted yellow with black and white to the drawings at sponsor's mark place. It drove the RE-30B with 15 and Rene Arnoux in 1981. The Rhombic emblem on the car is the mark of the firm.

«Bemalung des Renault RE-30B»
Die Farben des Renault RE-30B sind Zitronengelb mit schwarzen und weißen Streifen. Siehe Zeichnung der Abziehbilder und angebracht werden. Die RE-30B mit der roten 15 und Rene Arnoux hatte dem Wagen-Vorderrad das Renault angebracht.

«Colors Required»

★ From Tamiya Acrylic Paint
Black
White
Royal Blue
Orange
Red
Lemon Yellow
Brown
Gun Metal
Semi Gloss Black
Flat Black
Flat White
Flat Red
Hull Red
Flat Flesh
Flat Aluminum
Medium Grey
Metallic Grey
Desert Yellow
Flat Base
★ From Tamiya Paint
Chrome Silver
Gold Leaf

BUILD A COLLECTION PRECISION CAR

1/20 BRABHAM BT



1/12 RENAULT RE-2



1/12, 1/20 LOTUS 7

